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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,920	09/19/2003	Hannu Hakkinen	944-003.154-1	6487

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EXAMINER
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SCHEIBEL, ROBERT C

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/666,920	HAKKINEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Robert C. Scheibel	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-28 and 30-34 is/are allowed.
- 6) ☒ Claim(s) 29, 35-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

### **DETAILED ACTION**

- Applicant's Amendment filed 10/5/2005 is acknowledged.
- Claims 1-3, 5, 7, 21-30, 34, 36-38 and 40 are currently amended in this amendment.
- Claims 1-40 are currently pending.

### ***Response to Arguments***

1. Applicant's arguments, see the section titled "Claim Rejections under 35 U.S.C 112 on page 14, filed 10/5/2005, with respect to the rejection of claims 21-24, 26-27, 30, and 36-37 have been fully considered and are persuasive. The rejection of claims 21-24, 26-27, 30, and 36-37 under 35 U.S.C. 112 has been withdrawn.
2. Applicant's arguments, see the section titled "Claim Rejections under 35 U.S.C 112 on page 14, filed 10/5/2005, with respect to the rejection of claim 29 have been fully considered but they are not persuasive. The rejection of claim 29 under 35 U.S.C. 112 can be overcome by modifying claim 29 in a manner similar to the way in which claim 26 was amended in the present amendment.
3. Applicant's arguments, see the section titled "Claim Rejections under 35 U.S.C 102 on pages 14-16, filed 10/5/2005, with respect to the rejection of claims 35-40 have been fully considered but they are not persuasive.

Applicant summarizes the rejection in the first paragraph of this section. In the second paragraph, Applicant summarizes portions of independent claim 35. Applicant cites portions of the previous office action in the third paragraph, indicating that the previous rejection equated the payload symbols to the CQI signals of Terry and the

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indication symbols to the TSN signals of Terry. In the fourth paragraph of this section, Applicant argues that Terry teaches away from the claim language. Applicant argues that the teaching of the addition of a single bit in lines 16-17 of paragraph 46 of Terry indicates that a CQI symbol could be the same as a TSN symbol. However, Examiner respectfully disagrees. Examiner understands this teaching of Terry to mean that there is an additional bit within these fields which is used to distinguish a CQI symbol from a TSN symbol. In fact, this bit is always different in a CQI symbol than it is in a TSN symbol, thus the CQI and TSN symbols are distinct. As such, Examiner maintains the rejection of the previous action.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 29 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 29 recites the limitation "the sequences of time intervals" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 29 recites the limitation "the time of receipt" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Claim 29 recites the limitation "the data signal" in line 11. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims **35-40** are rejected under 35 U.S.C. 102(a) as being anticipated by U.S.

Patent Application Publication Number 2004/0004954 to Terry et al.

Regarding claim **35**, Terry discloses a method, comprising a step in which a signaling entity (12) (UE 605 of Figure 6) transmits to a signal-receiving entity (14) (Node-B 615 of Figure 6) in a current time interval a payload message (CQI – see Figures 7 and 8) including one or more payload symbols from a set of possible payload symbols for indicating signaling information (see the first sentence of paragraph 0049 for example), according to a first predetermined procedure; and a step in which the signaling entity (12) operates according to second predetermined procedure if no payload message transmitted in the current time interval (see lines 6-7 of paragraph 0051 which indicates that the TSN field is transmitted when the payload (CQI field) is not transmitted); wherein the second predetermined procedure includes transmitting one or more indication symbols each differing from each of the possible payload symbols (the signal receiving entity must be able to distinguish between these two types of information and thus the indication symbols (TSN field) differ from the payload symbols – see paragraph 0046 for example).

Regarding claim **36**, Figures 7 and 8 clearly show the limitation that the payload (CQI) and indication (TSN) symbols are transmitted on the same communication channel.

Regarding claim **37**, Terry discloses the limitation that the payload symbols (CQI) are selected from a predetermined small set of possible payload symbols in the fact that the CQI field has a fixed size and thus the values are selected from a predetermined set of possible symbols.

Regarding claim **38**, Terry discloses the limitation that the payload symbols and the indication symbols are sequences of equal length in Figures 7 and 8. Further, it is clear, given the embodiment where one bit differentiates between CQU and TSN reports (see the last line of paragraph 0046), that one of the payload (CQI) symbols will be further away on average from the indication (TSN) symbols.

Regarding claim **39**, as stated above, UE 605 of Figure 6 discloses the signaling entity.

Regarding claim **40**, Terry discloses the limitation that the signal-receiving entity is adapted to receive the indication symbols and to use the received indication symbols to determine the current state of the signalling entity. The TSN is actually a status report indicating the state (status) of the UE; the status report indicates the data that has actually been received by the UE and thus the current receiving state (see paragraph 0040 for example).

***Allowable Subject Matter***

5. Claims **1-28 and 30-34** are allowed.

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6. Claim 29 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,925,561 to Hunt et al discloses a radio communication system in which the ack and nack symbols are such that the ack/nack signatures are not the inverse of one another.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert C. Scheibel whose telephone number is 571-272-

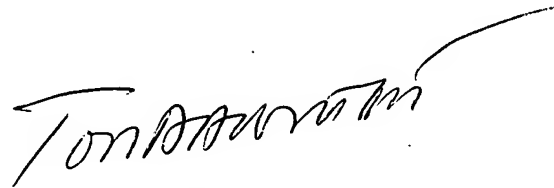
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3169. The examiner can normally be reached on Monday and Thursday from 6:30-5:00 Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert C. Scheibel  
Examiner  
Art Unit 2666

A handwritten signature in black ink, appearing to read 'DANG TON', with a long, sweeping horizontal line extending to the right.

**DANG TON**  
**PRIMARY EXAMINER**